Thereafter, the ceramic filter element is drilled 19, if needed, in order to make a fitting area to the filter element in order that the filter element will be fitted to the capillary suction dryer.

CLAIMS

1. Filter element to be used in removal of liquid from solids containing material to be dried in a capillary suction dryer which filter element contains a ceramic microporous layer having the pore size under 5 micrometer and supported by a ceramic internal layer having recess areas for liquid flowing, wherein the internal layer is made of at least one substrate which continuously surrounds at least one recess area and which ceramic internal layer is surrounded by at least one essentially continuous microporous surface layer.

2. Filter element according to the claim 1, wherein the filter element is provided with a fitting area where the substrate of the filter element is in mechanical contact with the capillary suction dryer.

3. Filter element according to the claim 1 or 2, wherein the fitting area is formed by a recess area.

4. Filter element according to the claim 1 or 2, wherein the fitting area is formed by drilling.

5. Method for manufacturing a filter element to be used in removal of liquid from solids containing material to be dried in a capillary suction dryer which filter element contains a ceramic microporous layer having the pore size under 5 micrometer and supported by a ceramic internal layer having recess areas for liquid flowing, wherein the method contains at least the steps:

1) a ceramic mix for the substrate is partly charged into a mold,

2) a core material for at least one recess area is added to the ceramic mix,

3) the rest of the ceramic mix for the substrate is charged into the mold,

4) the ceramic mix with the core material is pressed,

5) the ceramic mix with the core material is sintered at the temperature range of 1150 - 1550 °C for creating the substrate,

6) the substrate is covered by a ceramic microporous material,

7) the substrate covered by the ceramic microporous material is sintered at the temperature range of 1150 - 1550 °C for creating a filter element.

6. Method according to the claim 5, wherein the substrate is covered by a microporous material by dipping the substrate into the microporous material.

7. Method according to the claim 5, wherein the substrate is covered by a microporous material by spraying the microporous material on the surface of the substrate.

8. Method according to the claim 5, wherein the substrate is covered by a microporous material using by tape casting the microporous material on the surface of the substrate.

9. Method according to the claim 5, wherein the core material for the recess area is a wax.

10. Method according to the claim 9, wherein the core material for the recess area is paraffin.

11. Method according to the claim 9, wherein the core material for the recess area is beeswax.

12. Method according to the claim 9, wherein the core material for the recess area is microcrystalline wax.

13. Method according to the claim 9, wherein the core material for the recess area is citronella wax.

14. Method according to the claim 5, wherein the core material for the recess area is a biological material.

15. Method according to the claim 14, wherein the core material for the recess area is wood.

16. Method according to the claim 14, wherein the core material for the recess area is rush.

17. Method according to the claim 14, wherein the core material for the recess area is reed.

18. Method according to the claim 5, wherein the core material for the recess area is a polymeric material

19. Method according to the claim 18, wherein the core material for the recess area is plastics.

20. Method according to the claim 5, wherein the core material for the recess area is graphite.

21. Method according to the claim 5, wherein the core material for the recess area is ice.

22. Method according to the claim 5, wherein the core material for the recess area is dry ice.

23. Method according to the claim 5, wherein the core material for the recess area is a combination of at least two materials.